

ABSTRACT OF THE DISCLOSURE

A synthetic nuclease resistant antisense oligodeoxynucleotide capable of selectively modulating expression of human tumor necrosis factor-alpha by targeting exon sequences flanking donor splice sites, thereby regulating expression of TNF-α in a patient in need of such therapy is provided. In an embodiment either AS-ODN having the sequence set forth in SEQ ID No:4 or SEQ ID No:6 or a combination thereof can be used. The AS-ODN is administered either as the active ingredient in a pharmaceutical composition or by utilizing gene therapy techniques as an expression vector.